

SALTY'S HOME

Overview: In this activity, students use paper plates and construction paper to create Salty's Home Wheel. By turning the wheel, students reveal why salty, the salt marsh harvest mouse, is an endangered species.

Content Standards Correlations: Science, p. 305 & History/Social Science, p. 310

Grades: K-4

Key Concepts: The salt marsh harvest mouse lives only in the salt marshes of San Francisco Bay. Only 20% of salt marshes remain around the Bay. The loss of salt marsh habitat has caused the harvest mouse to become endangered.

Objectives:

Students will be able to:

- explain why the salt marsh harvest mouse is endangered

Materials:

- copies of the Habitat Picture Wheel, and Salty's Home: Directions, p. 154-155 (one per student)
- paper plates (2 per student)
- scissors
- glue
- paper fastener (one per student)
- brown construction paper (1/2 sheet per student)
- brown yarn (about 6 inches per student)
- crayons, colored pencils or markers
- one copy of picture of salt marsh harvest mouse, p. 166.

Time: 30 minutes

Adapted from "Wheel of Trouble", p. 37, *Nature Scope - Endangered Species: Wild and Rare*, National Wildlife Federation, 1989.

SUPPORTING INFORMATION ABOUT THIS ACTIVITY

- The salt marsh harvest mouse is tiny, but it is no ordinary mouse. It is unique in several ways.
 - First, the salt marsh harvest mouse only lives in the salt marshes of San Francisco Bay; it spends its entire life in bay area salt marshes.
 - Second, it has adapted to the changing of the tides that occurs in and around the bay every day.
 - Some mice build underground nests. Since the salt marsh harvest mouse lives where the tide moves in and out, it cannot live underground. Instead, this mouse builds a nest made out of dried grass among the dense pickleweed; the nest may have one to three entrances.
 - In addition, the tides cause the harvest mouse to frequently change its nest site.
 - Third, unlike most land mammals, which must have fresh water to drink in order to survive, the salt marsh harvest mouse can survive on the salty water and salty plants found in a salt marsh.
 - Pickleweed is one of the most common plants found in a salt marsh and is the favorite food of the salt marsh harvest mouse.
- The loss of salt marsh habitat to development has made it very difficult for the salt marsh harvest mouse to survive and has resulted in the salt marsh harvest mouse being listed as an endangered species.
 - In order for the salt marsh harvest mouse to survive, salt marsh habitat must be preserved and protected.
 - One reason the Don Edwards San Francisco Bay National Wildlife Refuge exists is to protect endangered species. The Refuge preserves salt marsh habitat for the salt marsh harvest mouse.



Pickleweed



Salt Marsh Harvest Mouse

TEACHING METHOD

Do

Show the students a picture of the salt marsh harvest mouse (page 166) and use the following questions to discuss the harvest mouse.

Ask

- ? Where does the salt marsh harvest mouse live? (In the salt marshes of San Francisco Bay.)
- ? What does the salt marsh harvest mouse eat? (Pickleweed.)
- ? What might eat the salt marsh harvest mouse? (Hawks, owls, egrets, herons, and clapper rails)
- ? Why is the salt marsh harvest mouse an endangered species? (Loss of salt marsh habitat.)

Read

"Each of you will be making "Salty's Home Wheel" to learn even more about why the salt marsh harvest mouse is endangered."

Do

Hand out the materials to the students.

Read

"You need to follow these directions to make the wheel (directions are also on student handout)."

1. "Color the pictures on the habitat picture wheel.
2. "Cut out the habitat picture wheel along the solid outer line.
3. "Glue the wheel to the back of a paper plate, using a thin layer of glue. Set the plate aside.
4. "Cut out a quarter of the second plate.
5. "On the second plate write "Where Is Salty's Home?"
6. "To make the plate look like a mouse, create a head and legs out of brown construction paper and a tail out of yarn. Glue or tape these pieces to the back of the plate which has the habitat picture wheel glued to it. (Use the drawings on pages 133 to guide you in cutting out the brown construction paper.)
7. "Place the cut-out plate on top of the plate with the pictures and push a paper fastener through the center of both plates. You may have to poke a hole through the plates with scissors or a pen.
8. "Salty should look like the picture on p. 155. As you turn the top or bottom plate, each of the four pictures will appear in the cut-out space."

Read

"These pictures illustrate four different habitat conditions for the mouse. As you look at each habitat, answer the following questions"

- ? Where is Salty?
- ? What activities are occurring in this habitat?
- ? How can this habitat be changed to help Salty?

Discussion

Ask

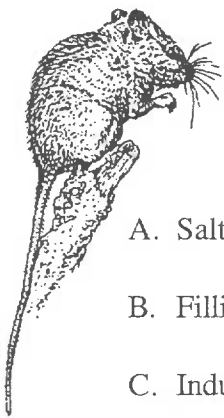
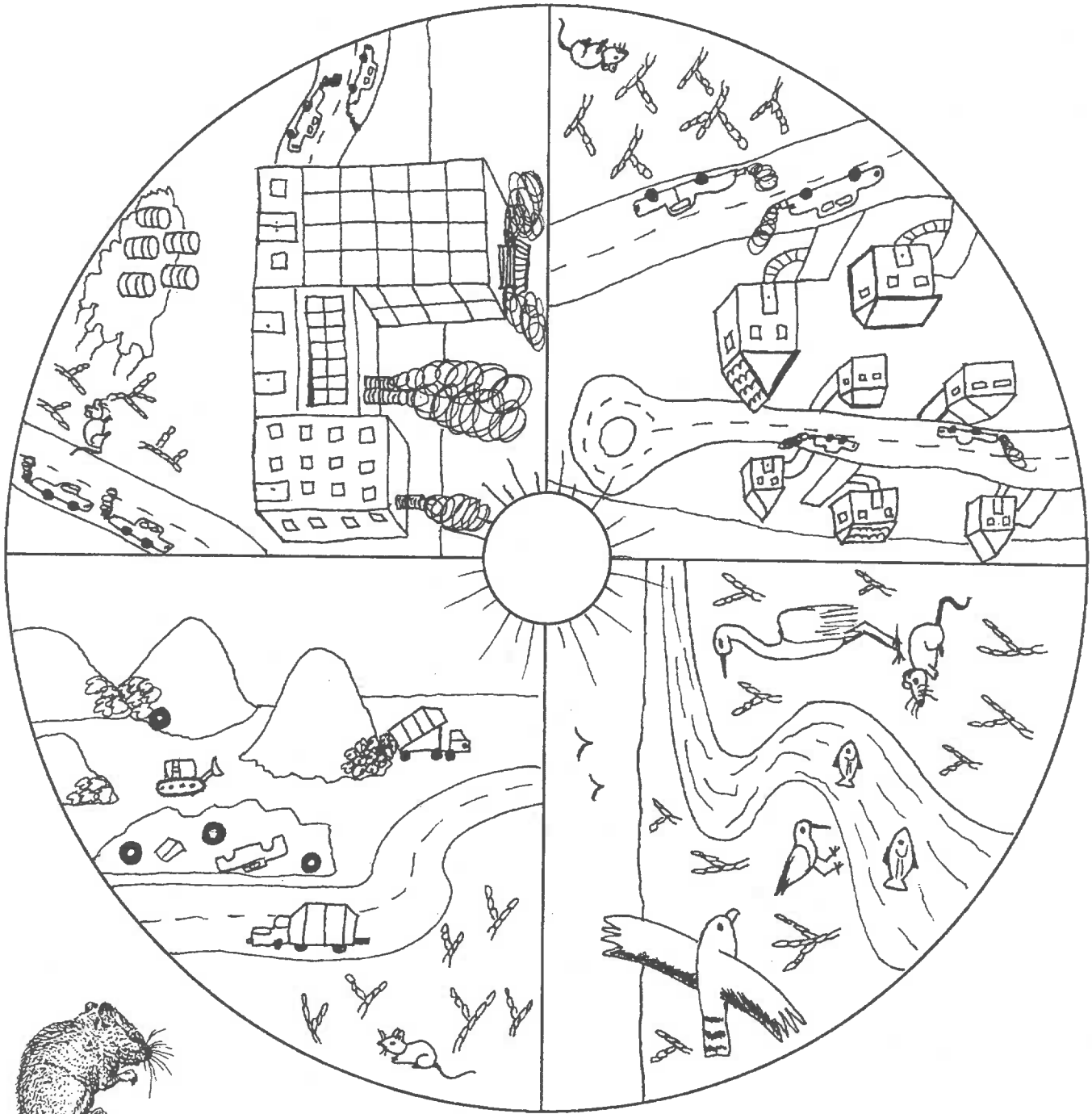
- ? Why should we protect endangered species? (Saving species is important to many people for a variety of reasons. People care about saving species for their intrinsic value, for their beauty, for their value to ecosystems, for scientific or educational purposes, and for their historic and cultural values. When a species is endangered, it indicates that something is wrong with the ecosystems we all depend upon. By protecting endangered species we are protecting the health of the planet.)
- ? What does the Refuge do to protect salt marsh harvest mice? (The Refuge protects salt marsh habitat - the salt marsh harvest mouse's habitat. The Refuge also conducts studies to monitor the salt marsh harvest mouse.)
- ? What can you do to help save Salty? (You can learn about Salty and other endangered species and spread the word, you can reduce, reuse, and recycle, you can label storm drains with warnings and never dump anything down a storm drain, and you can pick up litter around the Bay.)

Idea for Writing and Speaking Topic of Language Arts Content Standards, p. 311

Students can explore:
information about other endangered species of the San Francisco Bay.



HABITAT PICTURE WHEEL



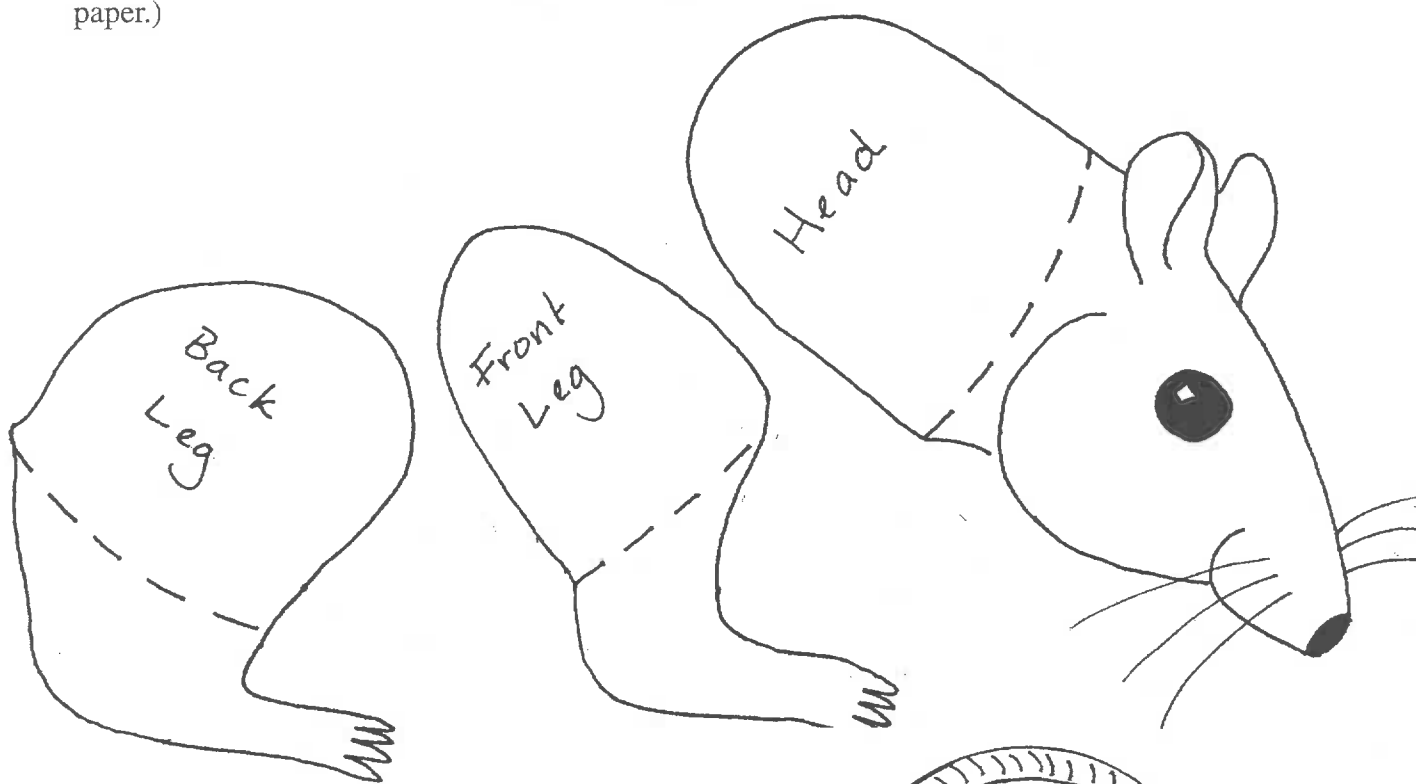
- A. Salty's favorite home is filled with lots of pickleweed to eat and clean salt water to drink.
- B. Filling the marsh to build houses decreases the amount of pickleweed for Salty's food and shelter.
- C. Industrial parks have covered all the marsh and polluted the water. Salty cannot live here.
- D. Garbage dumps have filled most of the marsh and often leak toxic material into the water.

SALTY'S HOME: DIRECTIONS

1. Color the pictures on the habitat picture wheel.
2. Cut out the habitat picture wheel along the solid outer line.
3. Glue the wheel to the back of a paper plate, using a thin layer of glue. Set the plate aside.
4. Cut out a quarter of the second plate.
5. On the second plate write "Where Is Salty's Home?"



6. To make the plate look like a mouse, create a head and legs out of brown construction paper and a tail out of yarn. Glue or tape these pieces to the back of the plate which has the habitat picture wheel glued to it. (Use the drawings below to guide you in cutting out the brown construction paper.)



7. Place the cut-out plate on top of the plate with the pictures and push a paper fastener through the center of both plates. You may have to poke a hole through the plates with scissors or a pen.
8. Salty should look like this. As you turn the top or bottom plate, each of the four pictures will appear in the cut-out space.

